

PROJECT ENSIGN

Financing Energy Services and Income-
Generating Opportunities for the Poor

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BACKGROUND

- ❖ As of 1998, 816 million people in the Asia-Pacific region (68% of the world's bottom poor) lived on less than US\$ 1 day; lack of energy was both a cause and an effect of their deprivation
- ❖ Poverty-slanted national energy policies focus primarily on the basic needs of the poor, usually through grants/subsidies which are not usually devoted to economic activities
- ❖ For instance, electricity from the grid or solar PV modules is used in rural households mainly for lighting and recreation
- ❖ Decentralised renewable energy promotion adopts a technology-fixated market penetration approach, leading to the flawed "*level playing field*" argument
- ❖ A basic needs approach to energy development might "*alleviate*" poverty, but it cannot "*eradicate*" poverty

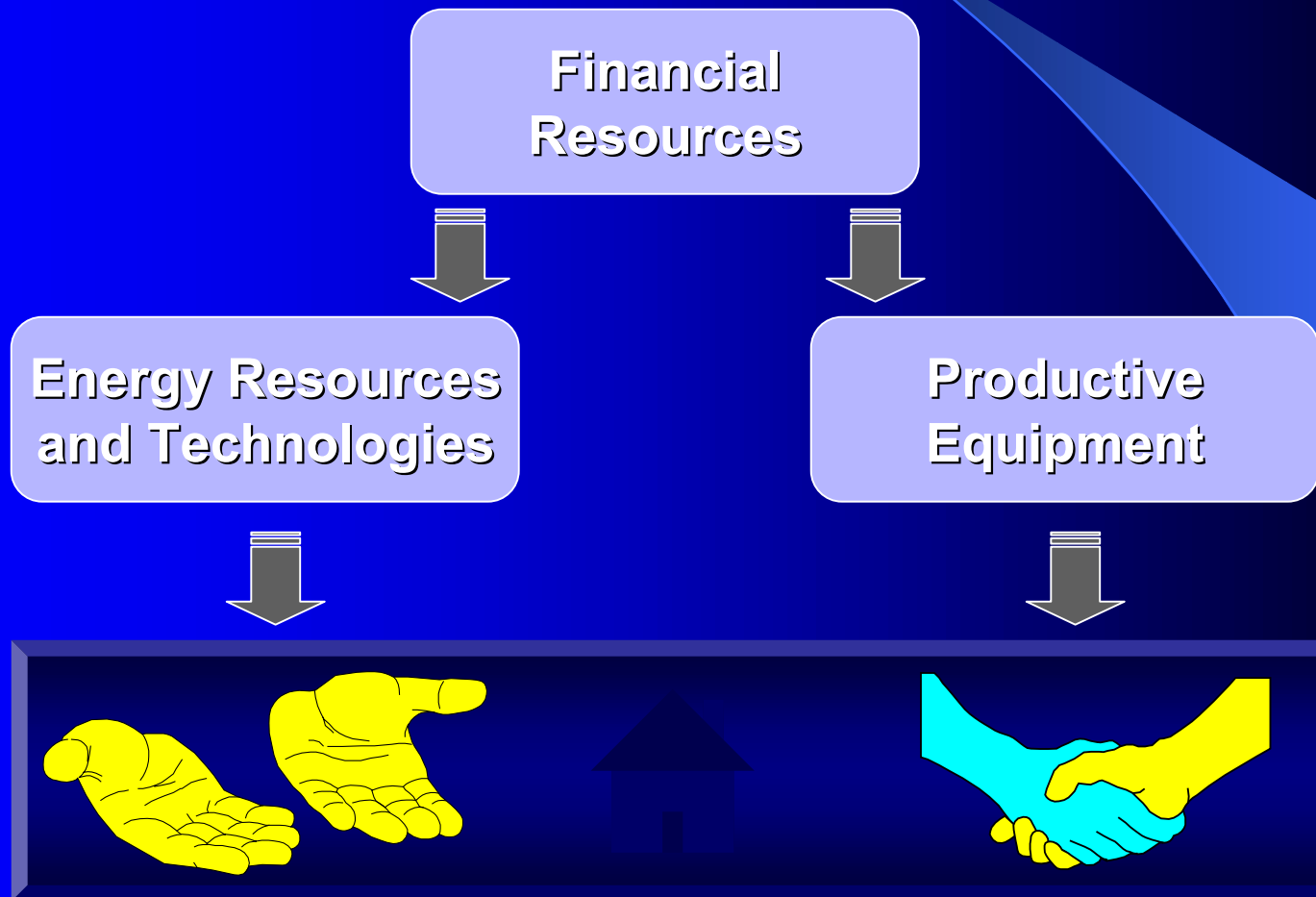


THE ENSIGN CONCEPT

- ❖ Access to modern energy services is crucial for breakthroughs in the economic status of the poor
- ❖ All modern energy services carry a cash price which is usually outside the poor's reach
- ❖ Conventional financing channels are unable or unwilling to lend essential capital to the poor
- ❖ Innovative financing mechanisms with a grassroots outreach and tailored to the poor's repayment capacity are required
- ❖ The poor's economic capacity to afford modern energy services can be enhanced only when associated income-generating activities are promoted
- ❖ Financing energy-intensive microenterprises for the poor through microcredit mechanisms can address the issue centrally



PROJECT MISSION





PARTICIPATING COUNTRIES

1. India (pilot country)
2. Indonesia
3. Mongolia
4. Myanmar
5. Nepal
6. Philippines (pilot country)
7. Sri Lanka
8. Vietnam



MAIN ACTIVITIES

- ❖ Review of SEWA Bank (India) to establish feasibility of an energy-linked microenterprise loan portfolio
- ❖ Analysis of renewable energy project implementation experiences in Philippines to develop methodology for formulating energy-cum-income generation projects
- ❖ Establishment of a Regional Revolving Fund to co-finance a set of pilot projects in participating countries
- ❖ Scoping studies of policies and institutions for energy, poverty alleviation/eradication and microfinancing to identify opportunities for convergence in future replication
- ❖ Documentation of project outcomes through manuals, guidelines and reports to assist future capacity-building efforts



KEY ELEMENTS OF THE PROJECT

**Decentralised
energy supplies**

**Centralised
energy supplies**

**Efficient
appliances**

**Upstream
financing
sources**

**Micro-
financing
institutions**

**Poor
borrowers**

**Income from house-
hold enterprises**

**Income from
community
enterprises**

**Savings in
expenditure**



KEY ACTORS IN THE PROCESS





GAPS IN ENERGY-POVERTY-MICROFINANCE NEXUS

- ❖ Rise in absolute numbers of poor despite decrease in their proportion — *from 11% in 1997 to 40% in 1998 in Indonesia*
- ❖ National poverty alleviation/eradication programmes do not effectively address energy needs of the poor — *in India, energy expenditure of poor is second only to expenditure on food*
- ❖ Energy policies and programmes lack a specific focus on the poor and generally address basic needs rather than productive needs — *less than 3% of energy consumed by the poor in Indonesia is for productive activities*
- ❖ Microfinancing programmes are unaware of the benefits of energy — *in India, low productivity in microenterprises is linked with low electricity use*



RURAL/URBAN DISTINCTIONS

- ❖ For the rural poor, decentralised energy services are more effective solutions, especially in countries like Mongolia and Nepal
- ❖ For the urban poor, centralised energy services combined with efficient end-use appliances offer the most viable possibilities

In both rural and urban contexts, process heat and motive power are more crucial to income-generation than lighting



ENSIGN PILOT PROJECTS: LOAN STRUCTURE

- ❖ ENSIGN Revolving Fund: 36%; National Financing Institutions: 50%; Borrowers' Equity: 14% of total loan funds
- ❖ Interest rate to borrowers somewhat below market rates — varying between 15% in Indonesia to 20.5% in Myanmar
- ❖ Repayment periods of 2 to 6 years, with longer repayment schedules and grace periods associated with projects involving renewable energy

34 pilot projects, covering 1,400 beneficiaries in 275 households, financed by ENSIGN loans



ECONOMIC IMPACTS

	No. of Households	No. of Beneficiaries	% Increase in Income
India	28	139	55.5
Indonesia	33	132	89.0
Mongolia	32	120	137.5
Myanmar	25	25	61.0
Nepal	5	150	9.0
Philippines	30	210	233.0
Sri Lanka	66	330	306.0
Total/Average	219	1,106	123.0

Community projects generated significantly higher income growth than household projects



ENSIGN PILOT PROJECTS: GENDER DIMENSION

- ❖ Vast majority of borrowers were women
- ❖ They proved enterprising, innovative and creditworthy
- ❖ Apart from income impacts, women borrowers benefitted through reduced labour which allowed greater time for child care, recreational activities and social interaction
- ❖ A significant impact on women was their enhanced self-confidence arising from improved ability to support household income and greater control over self-generated finances

Motivating factors for poor women cannot be readily fitted into conventional wisdom



LESSONS FROM PILOT PROJECTS

- ❖ Need to account for transaction costs of intermediaries
- ❖ Creditworthiness of women generally better than that of men
- ❖ Borrowers for ENSIGN-type loans are not usually the bottom poor; however, bottom poor often employed as labour in pilot projects
- ❖ While access to own resources is an advantage, this is not a pre-condition for success
- ❖ Need for a “Business Facilitator”, possibly NGOs, in future replication efforts



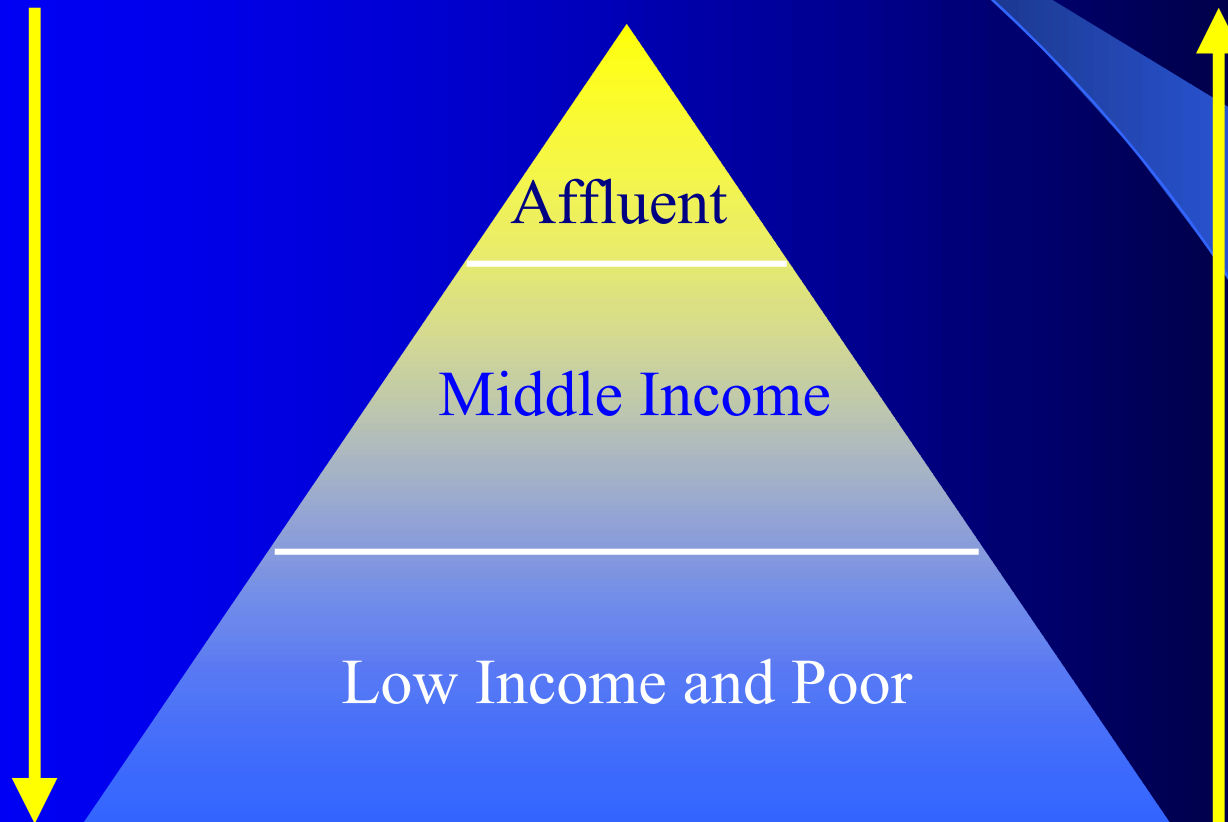
KEY CONCLUSIONS

- ❖ Need for an explicit gender focus given that vast majority of ENSIGN borrowers were women
- ❖ Need for much greater attention to income-generating uses of energy as opposed to other household uses
- ❖ Need to put poverty eradication ahead of energy technology promotion
- ❖ Need to concentrate on technologies that can provide heat and motive power – greater suitability of renewable energy in rural context
- ❖ Need for enabling national policies to empower microfinancing institutions and NGO business facilitators
- ❖ Need to mobilise an upstream financing base



PARADIGM CHANGE REQUIRED

CONVENTIONAL TOP-DOWN MARKET PENETRATION



ENSIGN-TYPE BOTTOM-UP MARKET CREATION